

**IN THE ABSTRACT:**

Please DELETE the Abstract in its entirety and substitute the attached new Abstract.

The invention relates to a method for increasing the precision during the determination of system parameters dependent on the propagation delay, e.g. for a positional determination, in a mobile communications system with emission diversity, according to which a subscriber data signal and a reference signal are assigned to a subscriber. The subscriber data signal is emitted by at least two antenna devices on the emission side, whereas the reference signal is emitted exclusively by one antenna device on the emission side. The reference signal is used to precisely determine signal propagation delays, upon which the system parameters depend.